



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1216593  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed  
Form must be Signed  
All blanks must be Filled

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic       Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

1216593

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No  List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:	Size: _____ Set At: _____ Packer At: _____	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
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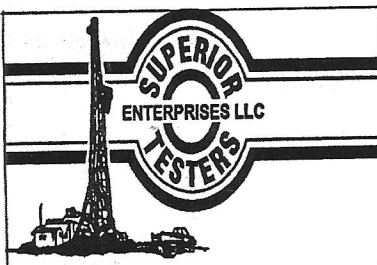
Date of First, Resumed Production, SWD or ENHR. _____	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
Estimated Production Per 24 Hours	Oil Bbls. _____ Gas Mcf _____ Water Bbls. _____ Gas-Oil Ratio _____ Gravity _____

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Bird Dog Oil, LLC
Well Name	Lakin-Engelhardt 1-13
Doc ID	1216593

All Electric Logs Run

DIL
POR
MEL
Sonic



# DRILL STEM TEST REPORT

Bird Dog Oil, LLC  
 1801 Broadway Ste 450, Denver Co 80202  
 ATTN: Adam Nighswinger

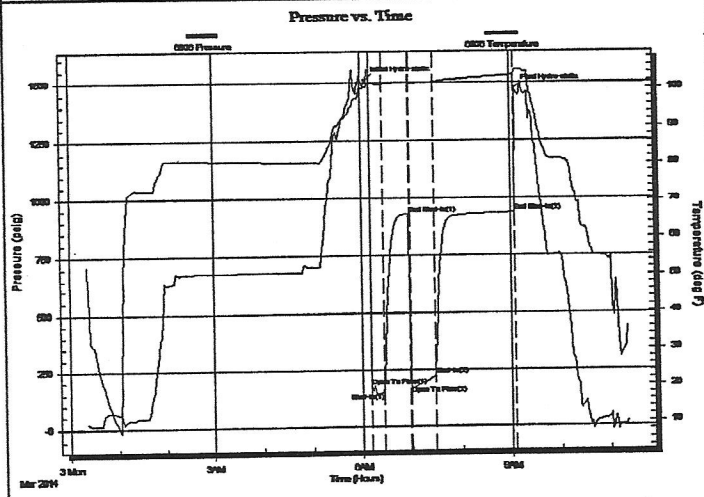
13/19s/11w/Barton  
 Lakin-Engelhardt1-13  
 Job Ticket: 19207 DST#: 1  
 Test Start: 2014.03.03 @ 00:20:00

## GENERAL INFORMATION:

Formation: LKC "A-B"  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Shane Konzem  
 Time Tool Opened: 06:12:00  
 Unit No: 3330/30/Great Bend  
 Time Test Ended: 11:20:00  
 Interval: 3036.00 ft (KB) To 3088.00 ft (KB) (TVD)  
 Reference Elevations: 1788.00 ft (KB)  
 Total Depth: 3088.00 ft (KB) (TVD)  
 1778.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 KB to GR/CF: 10.00 ft

Serial #: 6806 Outside  
 Press@RunDepth: 936.46 psig @ 3085.60 ft (KB) Capacity: 5000.00 psig  
 Start Date: 2014.03.03 End Date: 2014.03.03 Last Calib.: 2014.03.03  
 Start Time: 00:20:00 End Time: 11:21:00 Time On Btm: 2014.03.03 @ 06:05:30  
 Time Off Btm: 2014.03.03 @ 09:06:00

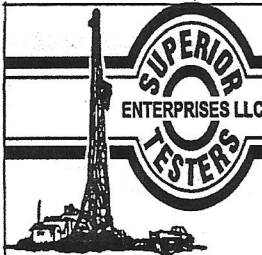
TEST COMMENT: 1st Open/ 15 Minutes. Strong blow built to bottom of 5 gallon bucket od deisel in 30 seconds.  
 1st Shut In/ 30 Minutes. Blow back built to bottom of 5 gallon bucket then died back to 9 inches.  
 2nd Open/ 30 Minutes. Strong blow built to bottom of 5 gallon bucket in 45 seconds. Gas to surface in 7Min.  
 2nd Shut In/ 90 Minutes. Blow back built to bottom of 5 gallon bucket then died back to 6 inches.



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1508.73	100.28	Initial Hydro-static
6	176.21	101.10	Open To Flow (1)
20	148.77	101.09	Shut-In (1)
52	930.36	101.51	End Shut-In (1)
53	177.65	101.32	Open To Flow (2)
82	224.74	101.66	Shut-In (2)
179	936.46	103.45	End Shut-In (2)
181	1472.65	104.28	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
209.00	20% Gas, 80% Mud	2.93

Gas Rates			
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	10.80	92.31
Last Gas Rate	0.38	13.50	102.20
Max. Gas Rate	0.38	17.00	115.03



# DRILL STEM TEST REPORT

Bird Dog Oil, LLC  
 1801 Broadway Ste 450, Denver Co 80202  
 ATTN: Adam Nighswinger

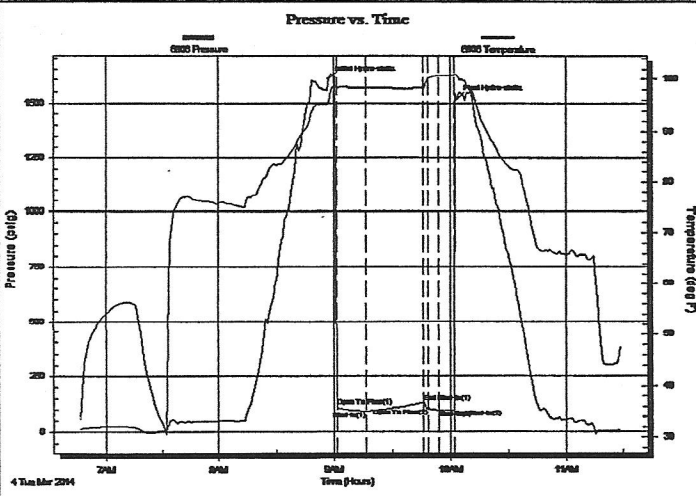
13/19s/11w/Barton  
 Lakin-Engelhardt1-13  
 Job Ticket: 19208 DST#: 2  
 Test Start: 2014.03.04 @ 06:45:00

## GENERAL INFORMATION:

Formation: **LKC "H-J"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 09:01:30  
 Time Test Ended: 11:28:30  
 Interval: **3174.00 ft (KB) To 3240.00 ft (KB) (TVD)**  
 Total Depth: **3240.00 ft (KB) (TVD)**  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Shane Konzern  
 Unit No: 3330/30/Great Bend  
 Reference Elevations: 1788.00 ft (KB)  
 1778.00 ft (CF)  
 KB to GR/CF: 10.00 ft

**Serial #: 6806 Outside**  
 Press@RunDepth: 101.26 psig @ 3237.75 ft (KB) Capacity: 5000.00 psig  
 Start Date: 2014.03.04 End Date: 2014.03.04 Last Calib.: 2014.03.04  
 Start Time: 06:45:00 End Time: 11:28:30 Time On Btm: 2014.03.04 @ 08:57:30  
 Time Off Btm: 2014.03.04 @ 10:03:30

**TEST COMMENT:** 1st Open/ 15 Minutes. Weak blow built to 1 inch into deisel.  
 1st Shut In/ 30 Minutes. No blow back.  
 2nd Open/ 5 Minutes. Weak blow built to 1/2 inch into deisel. Pulled test per Geo.  
 2nd Shut In/ N/A

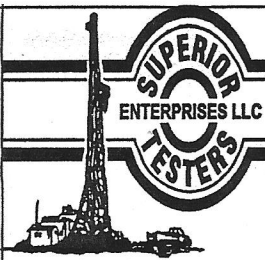


PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1603.67	95.88	Initial Hydro-static
4	114.18	98.48	Open To Flow (1)
19	94.35	98.40	Shut-In(1)
49	132.50	98.33	End Shut-In(1)
51	104.65	100.09	Open To Flow (2)
57	97.16	100.76	Shut-In(2)
65	101.26	100.84	End Shut-In(2)
66	1513.80	100.87	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
15.00	100% Mud	0.21

Gas Rates			
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)





# DRILL STEM TEST REPORT

Bird Dog Oil, LLC  
 1801 Broadway Ste 450, Denver Co 80202  
 ATTN: Adam Nighswinger

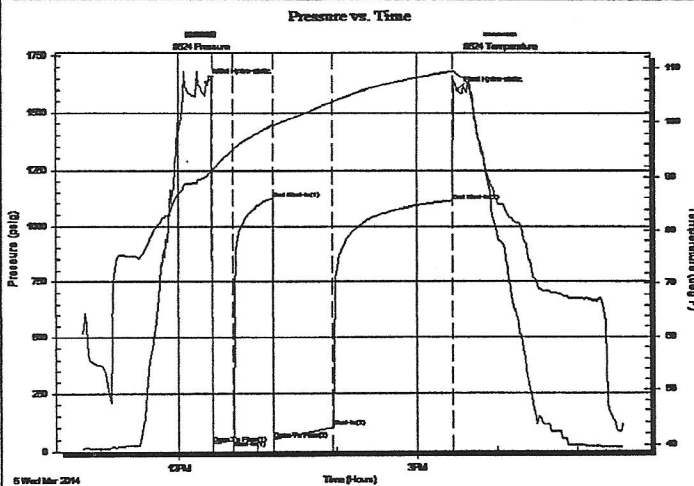
13/19s/11w/Barton  
 Lakin-Engelhardt1-13  
 Job Ticket: 19210 DST#: 4  
 Test Start: 2014.03.05 @ 10:45:00

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 12:27:30  
 Time Test Ended: 17:36:00  
 Interval: **3333.00 ft (KB) To 3341.00 ft (KB) (TVD)**  
 Total Depth: 3341.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Shane Konzern  
 Unit No: 3330/30/Great Bend  
 Reference Elevations: 1788.00 ft (KB)  
 1778.00 ft (CF)  
 KB to GR/CF: 10.00 ft

Serial #: **8524** Outside  
 Press@RunDepth: 1110.72 psig @ 3338.00 ft (KB) Capacity: 5000.00 psig  
 Start Date: 2014.03.05 End Date: 2014.03.05 Last Calib.: 2014.03.05  
 Start Time: 10:45:00 End Time: 17:34:30 Time On Btm: 2014.03.05 @ 12:21:30  
 Time Off Btm: 2014.03.05 @ 15:30:30

TEST COMMENT: 1st Open/ 15 Minutes. Fair blow built to 9 inches into bucket of diesel.  
 1st Shut In/ 30 Minutes. Weak surface blow back.  
 2nd Open/ 45 Minutes. Fair blow built to bottom of 5 gallon bucket in 23 minutes.  
 2nd Shut In/ 90 Minutes. Weak surface blow back that died out 60 minutes into shut in.

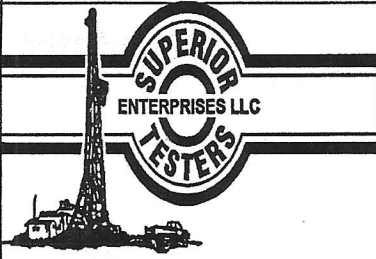


PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1633.09	90.19	Initial Hydro-static
5	33.92	91.20	Open To Flow (1)
21	48.45	94.83	Shut-In(1)
51	1120.89	99.39	End Shut-In(1)
51	50.75	99.16	Open To Flow (2)
96	97.84	103.70	Shut-In(2)
186	1110.72	109.27	End Shut-In(2)
189	1597.79	108.64	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
0.00	252 Feet 100% Gas	0.00
137.00	25% Gas, 75% Clean Oil.	1.92
63.00	40% Mud, 15% Water, 45% Oil	0.88
0.00	Chloride recov, 26000 ppm	0.00
0.00	resist recov, .21 @ 40 degrees	0.00
0.00	Oil gravity was 42 corrected.	0.00

Gas Rates			
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)





# DRILL STEM TEST REPORT

Bird Dog Oil, LLC  
 1801 Broadway Ste 450, Denver Co 80202  
 ATTN: Adam Nighswinger

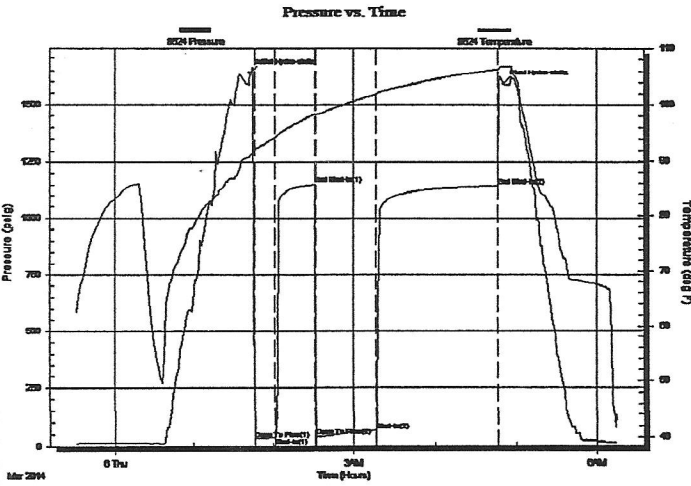
13/19s/11w/Barton  
 Lakin-Engelhardt1-13  
 Job Ticket: 19211      DST#:5  
 Test Start: 2014.03.05 @ 23:30:00

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 01:47:30  
 Time Test Ended: 06:16:30  
 Interval: **3341.00 ft (KB) To 3347.00 ft (KB) (TVD)**  
 Total Depth: **3347.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Poor**  
 Test Type: **Conventional Bottom Hole (Initial)**  
 Tester: **Shane Konzern**  
 Unit No: **3330/30/Great Bend**  
 Reference Elevations: **1788.00 ft (KB)**  
**1778.00 ft (CF)**  
**KB to GR/CF: 10.00 ft**

Serial #: **8524** Outside  
 Press@RunDepth: **1147.30 psig @ 3344.00 ft (KB)** Capacity: psig  
 Start Date: **2014.03.05** End Date: **2014.03.06** Last Calib.: **1899.12.30**  
 Start Time: **23:30:00** End Time: **06:16:00** Time On Btm: **2014.03.06 @ 01:43:00**  
 Time Off Btm: **2014.03.06 @ 04:51:00**

TEST COMMENT: 1st Open/ 15 Minutes. Fair blow built to 4 inches into deisel.  
 1st Shut In/ 30 Minutes. Weak surface blow back.  
 2nd Open/ 45 Minutes. Fair blow built to bottom of 5 gallon bucket in 35 minutes.  
 2nd Shut In/ 90 Minutes. Weak surface blow back that died after 45 minutes.

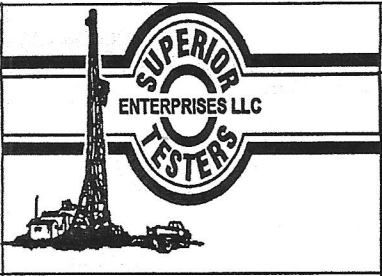


PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1637.52	90.75	Initial Hydro-static
4	30.04	91.67	Open To Flow (1)
19	37.33	94.24	Shut-In(1)
49	1154.23	98.37	End Shut-In(1)
50	38.61	98.24	Open To Flow (2)
94	66.90	101.83	Shut-In(2)
184	1147.30	106.39	End Shut-In(2)
188	1591.43	106.81	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
0.00	189 foot 100% gas	0.00
126.00	100% Clean gassy oil	1.77
0.00	Oil gravity was 42 corrected	0.00

Gas Rates			
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)





# DRILL STEM TEST REPORT

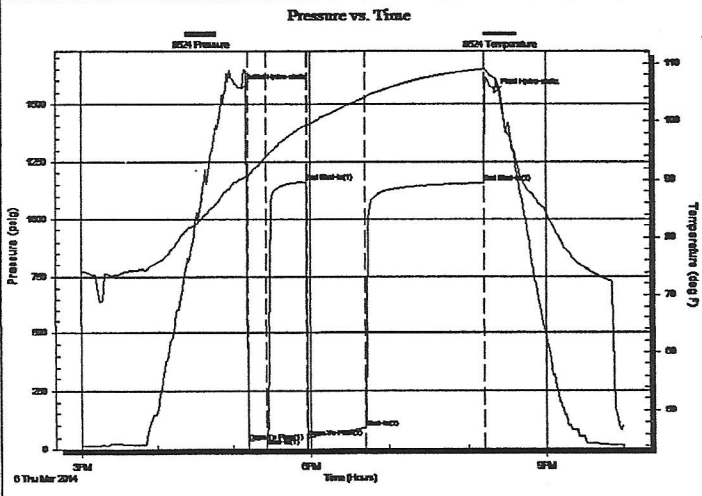
Bird Dog Oil, LLC 13/19s/11w/Barton  
 1801 Broadway Ste 450, Denver Co 80202 Lakin-Engelhardt1-13  
 ATTN: Adam Nighswinger Job Ticket: 19212 DST#: 6  
Test Start: 2014.03.06 @ 15:00:00

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock ft (KB)  
 Time Tool Opened: 17:11:30  
 Time Test Ended: 22:00:00  
 Interval: **3347.00 ft (KB) To 3357.00 ft (KB) (TVD)**  
 Total Depth: 3357.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Shane Konzem  
 Unit No: 3330/30/Great Bend  
 Reference Elevations: 1788.00 ft (KB)  
 1778.00 ft (CF)  
 KB to GR/CF: 10.00 ft

Serial #: **8524** Outside  
 Press@RunDepth: 1159.81 psig @ 3354.00 ft (KB) Capacity: 5000.00 psig  
 Start Date: 2014.03.06 End Date: 2014.03.06 Last Calib.: 2014.03.06  
 Start Time: 15:00:00 End Time: 21:59:30 Time On Btm: 2014.03.06 @ 17:07:30  
 Time Off Btm: 2014.03.06 @ 20:21:00

TEST COMMENT: 1st Open/ 15 Minutes. Fair blow built to 6 inches into deisel.  
 1st Shut In/ 30 Minutes. No blow back.  
 2nd Open/ 45 Minutes. Fair blow built to bottom of 5 gallon bucket of deisel in 30 minutes.  
 2nd Shut In/ 90 Minutes. No blow back.



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1570.62	90.27	Initial Hydro-static
5	33.88	90.56	Open To Flow (1)
19	46.99	93.95	Shut-In(1)
50	1165.97	99.45	End Shut-In(1)
50	48.69	99.34	Open To Flow (2)
95	89.15	104.07	Shut-In(2)
185	1159.81	109.08	End Shut-In(2)
194	1549.56	107.43	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
0.00	189 foot 100% gas	0.00
87.00	100% Clean Oil	1.22
63.00	70% Mud, 25% water, 5% oil	0.88
0.00	Chloride recov 26000 ppm	0.00
0.00	resist recov, .21 ohms at 40 degrees	0.00
0.00	Oil gravity was 41 corrected.	0.00

Gas Rates			
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Customer B710 Dog Oil LLC	Lease No.	Date 2-27-14
Lease LAKIN Engelhardt	Well # 1-13	
Field Order # 4924	Station Pratt	Casing 8 5/8
		Depth 348.75
Type Job CNW SURFACE	Formation	County Barton
		State KS
		Legal Description 13-19-1

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size 8 5/8	Tubing Size	Shots/Ft		Acid 275 SLS	RATE COMMON	PRESS 275 psi	ISIP 270 cc	1/2 CR
Depth 348.75	Depth	From	To	Pre Pad	Max		5 Min.	
Volume 21.7	Volume	From	To	Pad	Min		10 Min.	
Max Press 300	Max Press	From	To	Frac	Avg		15 Min.	
Well Connection P.C.	Annulus Vol.	From	To		HHP Used		Annulus Pressure	
Plug Depth 328.75	Packer Depth	From	To	Flush 20.5	Gas Volume		Total Load	

Customer Representative Kelly Branun	Station Manager	Treater
Service Units 37586	27463	19826 19860
Driver Names MATTI	KUENEN	HANSON

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
8:55					ON LOCATION / SAFETY MEETING
9:35					CASING ON BOTTOM
9:42					HOOK UP TO CASING / BREAK CIRC W RIG
9:55	100		3	5	PUMP 3 BBI H <sub>2</sub> O
10:13	150		6.5	5	MIX 275 SLS COMMON CEMENT
10:15	200		-	5	RELEASE PLUG, START DISC.
10:18	250		10	5	CEMENT COMING AROUND
10:20	300		20.5		PLY DOWN, SHUT IN WELL
					CIRC / TRIM JOB
					JOB COMPLETE
					THANK YOU!
					MIKE MATTI
					10 BBLS CMT TO PIT

Lease No.		Date	
Well #		3-7-14	
Order #	Station	Casing	Depth
9806	Pratt	D.P.	3326
Job		Formation	Legal Description
CAN PTA			13-19-11

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP	
4.75	3.375			210 SKS.				5 Min.
Depth	Depth	From	To	Pre Pad	Max			10 Min.
3326				60/40 POZ				15 Min.
Volume	Volume	From	To	Pad	Min			
47.29				4% GEL				
Max Press	Max Press	From	To	Frac	Avg			
300								
Well Connection	Annulus Vol.	From	To		HHP Used			Annulus Pressure
8.75								
Plug Depth	Packer Depth	From	To	Flush	Gas Volume			Total Load
3326								

Customer Representative	Station Manager	Treater
Kelly Brannum	Kevin Goodley	Mike Matta
Service Units	19826	19860
Driver Names	Matta	Hanson

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
5:40					ON LOCATION / SARTREY MEETING
6:17	100		11	5	1 <sup>st</sup> Plug @ 3326' w 50 sacks
6:22	100		12	5	PUMP 11 BBL H2O
6:26	100		4	15	Mix 50 SKS 60/40 POZ
6:28	100		40	5	PUMP 4 H2O
					2 <sup>nd</sup> Plug @ 1400' w 25 sacks
8:59	100		10	5	PUMP 10 BBL H2O
9:00	100		6	5	Mix 25 SKS 60/40 POZ
9:02	100		17	5	PUMP 17 BBLs DISP.
					3 <sup>rd</sup> Plug @ 450' w 80 SKS
9:41	100		2	5	PUMP 2 BBL H2O
9:42	100		20	5	Mix 80 SKS 60/40 POZ
9:47	100		4	5	PUMP 4 BBL DISP.
					4 <sup>th</sup> Plug @ 40'
10:37			25	3	Mix 10 SKS 60/40 POZ
					5 <sup>th</sup> Plug @ 40'
10:45			7.5	3	Plug CAT + Mouse hole
					JOB COMPLETE
					THANK YOU!
					MIKE MATTA